

# Evaluating the Accuracy and Efficacy of the Income and Program Screeners in the 2022 Survey of Income and Program Participation

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*Any conclusions expressed herein are those of the authors and do not reflect the views of the U.S. Census Bureau. The Census Bureau has reviewed this data product to ensure appropriate access, use, and disclosure avoidance protection of the confidential source data used to produce this product (Data Management System (DMS) number: P-7503064, Disclosure Review Board (DRB) approval number: CBDRB-FY25-SEHSD003-002). The estimates are unweighted and therefore cannot be generalized to the population. No statistical inferences are being made, so comparative statements in this report are not supported by statistical testing. The results presented are only applicable to the described cohort of SIPP survey respondents.*

# Background

- The Survey of Income and Program Participation (SIPP) uses a series of questions designed to screen out high-income respondents from questions about programs that provide support to low-income households.
- Our working paper was the first effort to thoroughly assess the screeners since the 2014 redesign.

# What are the screener questions?

- The three screener questions ask sequentially about annual income, monthly income, and program participation.
  - The initial two questions ask whether income was below a specified threshold that corresponds to roughly 200 percent of poverty.
  - The final question in the screener sequence asks about receipt of assistance during the reference year from an array of means-tested programs.

# How were the screeners questions evaluated?

- Accuracy: How did responses to the income screeners compare to edited income?
- Efficacy: How many low-income people were asked detailed questions about their means-tested program receipt based on their responses to the income and program screeners?

# Data

- The analysis was conducted on restricted-use 2022 SIPP data.
- Types of data used for the analysis.
  - Unedited data.
  - Edited data.
- The analysis did not use survey weights or other adjustments.

Table 1. Screener Respondents Included and Excluded From the Analysis: 2022 SIPP  
(Unweighted)

Respondent type	Count	Percent
Screener respondents.....	24,500	100.0
Included in analysis.....	21,500	88.1
Self-reported interview....	18,500	75.7
Proxy interview.....	3,000	12.4
Excluded from analysis.....	2,900	11.9
Type Z.....	2,500	10.3
Incomplete response.....	400	1.6

Table 2. Household Size, Number of Respondents, and Alignment of Screener Responses Within Households: 2022 SIPP (Unweighted)

Household size and number of income screener respondents	Count	Percent
Total households included in analysis.....	17,000	100.0
One income screener respondent.....	13,500	79.7
Single-person household.....	5,700	33.2
Multiple-person household: Single respondent.....	8,000	46.5
Multiple-person household: Multiple respondents.....	3,500	20.3
All respondents in the household responded the same.....	2,400	13.9
Respondents in the household responded differently.....	1,100	6.4

Note: Numbers may not sum to the total due to rounding.

Source: U.S. Census Bureau, 2022 Survey of Income and Program Participation, restricted-use data.

# RQ1: Accuracy

	Edited income below the annual or monthly income threshold	Edited income at or above the annual and monthly income thresholds
YES response to either screener	TRUE POSITIVE	FALSE POSITIVE
NO response to both screeners	FALSE NEGATIVE	TRUE NEGATIVE



Table 3. Confusion Matrix for the Annual and Monthly Income Screener Questions:  
2022 SIPP (Unweighted percents)

	Edited income below the annual or monthly income threshold	Edited income at or above the annual and monthly income thresholds
YES response to either screener	<p><b>TRUE POSITIVE</b> 45.7</p>	<p><b>FALSE POSITIVE</b> 10.0</p>
NO response to both screeners	<p><b>FALSE NEGATIVE</b> 7.6</p>	<p><b>TRUE NEGATIVE</b> 36.7</p>

Source: U.S. Census Bureau, 2022 Survey of Income and Program Participation, restricted-use data.

Note: N = 21,500.

Figure 1. Response Accuracy of the Income Screener Questions by Age Group: 2022 SIPP (Unweighted percents)

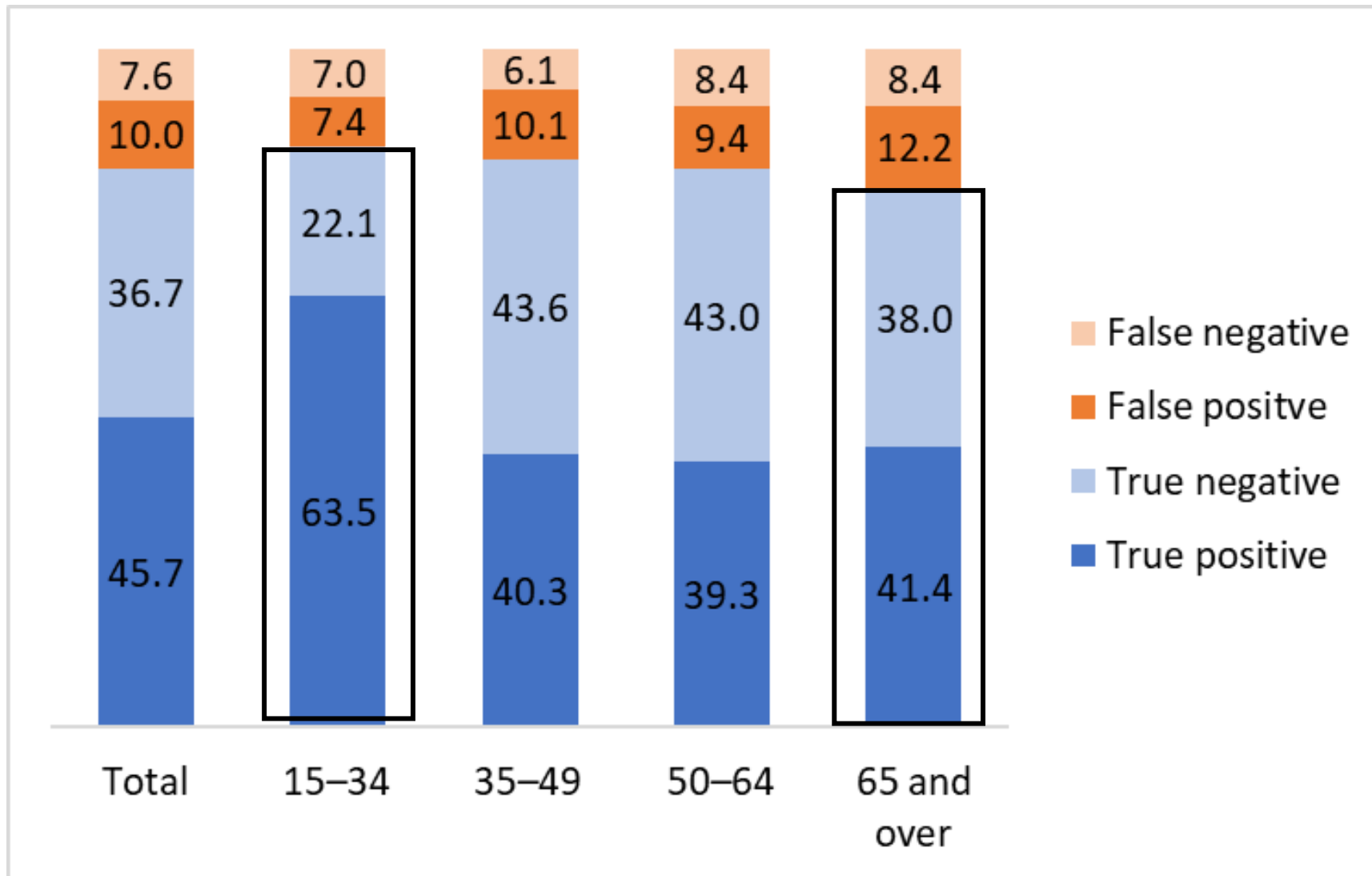
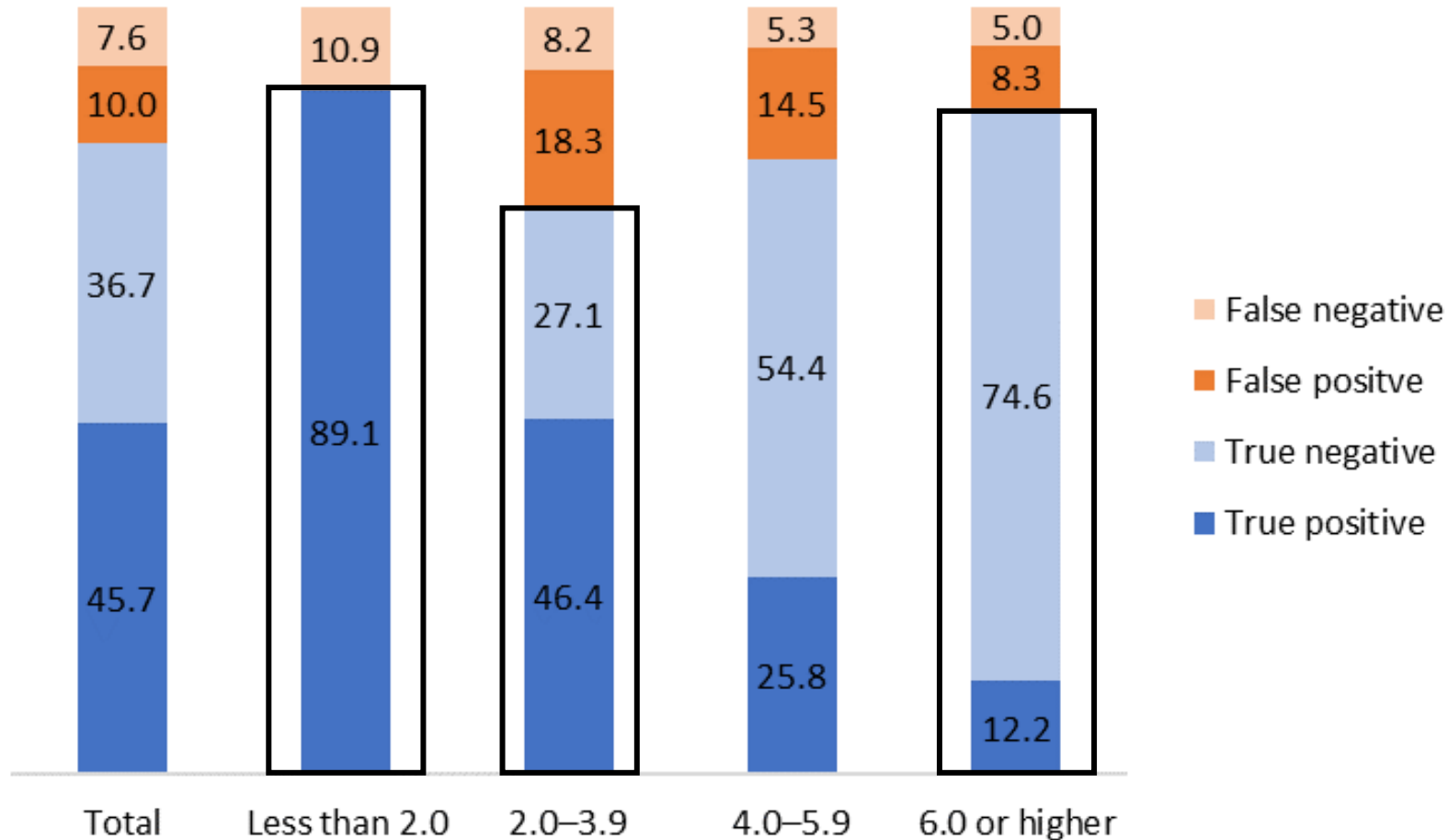


Figure 2. Response Accuracy of the Income Screener Questions by Household Income-to-Poverty Ratio: 2022 SIPP (Unweighted percents)



## RQ2: Efficacy

- How many households were asked the means-tested program questions based on responses to the income and program screeners?
- Outcomes were evaluated using household-level categories for respondent's answers to the screener questions:
  - Low-income response.
  - High-income response.
  - Mixed response.

Figure 3: Household level screener responses and edited income compared to the threshold asked about: 2022 SIPP (Unweighted percents)

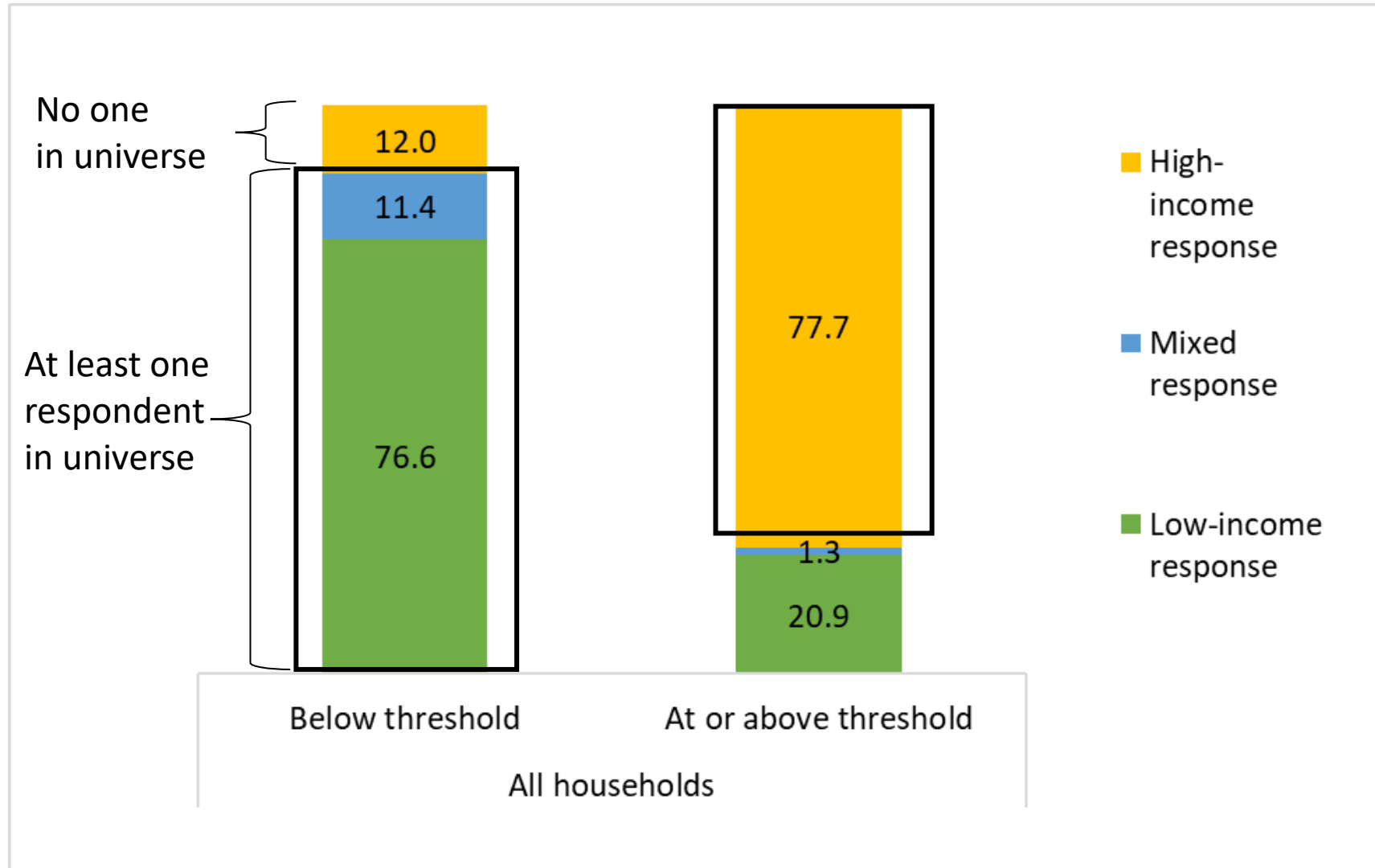
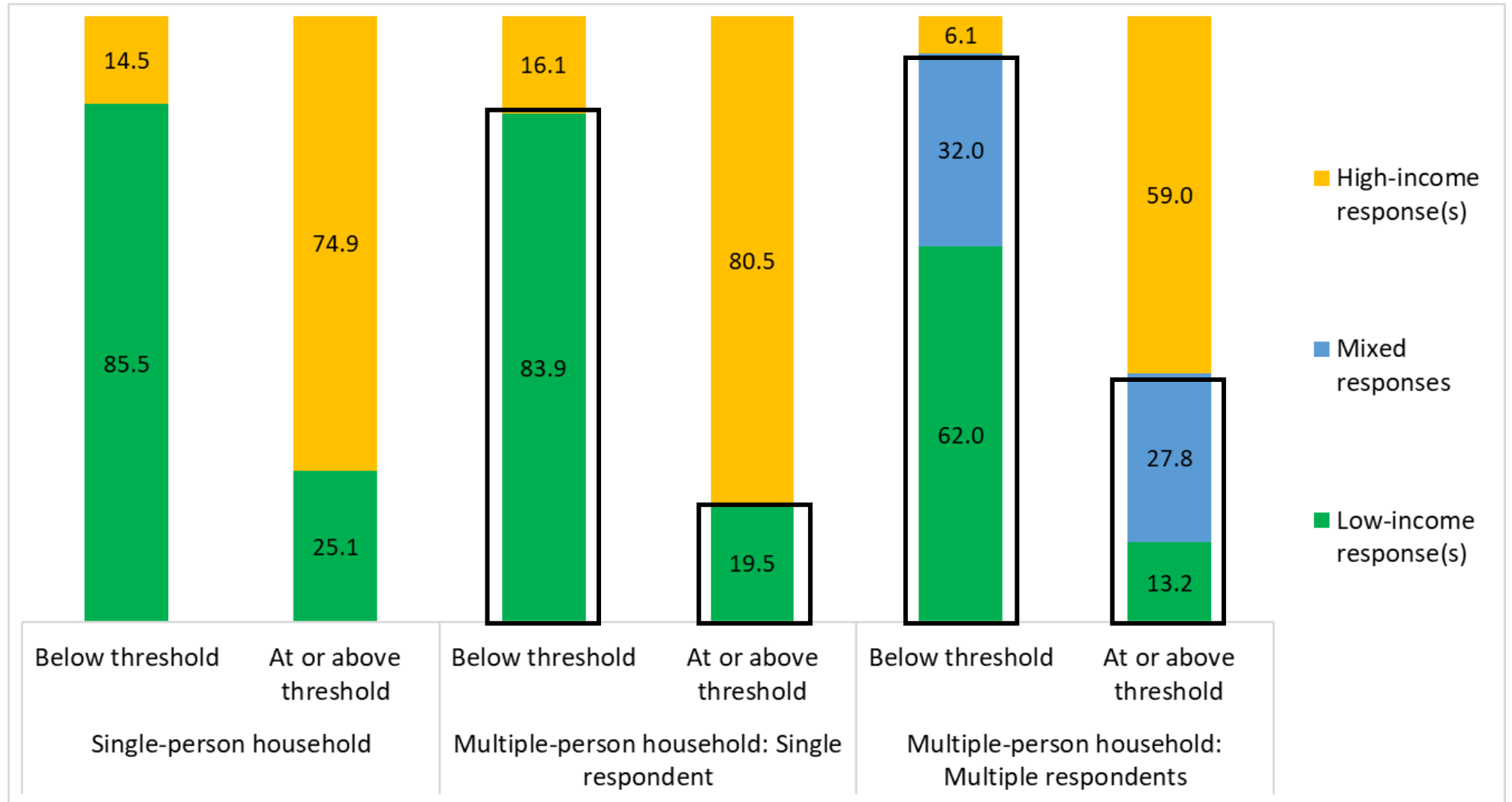


Figure 4: Household level screener responses by household composition and edited income compared to the threshold asked about: 2022 SIPP (Unweighted percents)



# Conclusion

- The screener questions are performing well.
- There is some variation by demographic characteristics and household composition.

Please reach out with comments or questions:

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